Quote of the Week: On the other hand, I think I can safely say that nobody understands quantum mechanics. So do not take the lecture too seriously, feeling that you really have to understand in terms of some model what I am going to describe, but just relax and enjoy it. I am going to tell you what nature behaves like. If you will simply admit that maybe she does behave like this, you will find her a delightful, entrancing thing. Do not keep saying to yourself, if you can possible avoid it, "But how can it be like that?" because you will get 'down the drain', into a blind alley from which nobody has escaped. Nobody knows how it can be like that. — Richard Feynman, The Messenger Lectures, 1964, MIT

Number of the Week: Air quality 19, Excellent, Temperature minus 106F (minus 77C)

THIS WEEK:
By Ken Haapala, President, Science and Environmental Policy Project (SEPP)

Scope: Among the topics discussed are the following. Patrick Frank has a thorough analysis of the problems of getting accurate readings from Liquid in Glass thermometers and the unreliable nature of the Surface-Air temperature readings relied upon by the UN Intergovernmental Panel on Climate Change (IPCC).

Atomic, Molecular, and Optical (AMO) physicists van Wijngaarden and Happer present evidence showing that the warming influences of gases used in refrigerants are greatly overestimated.

AMO physicist Howard Hayden discusses why “first principles” of physics are insufficient in capturing the effects of greenhouse gases on the Earth’s temperatures.

Kenneth Richards presents a new study on how the climate of North Africa changed during the period 9500 to 4500 years before present.

Gordon Hughes explains how the UK government has greatly underestimated the actual costs of converting to wind power in its quest for Net Zero.

Mikko Paunio has a new report on the failure of the EU to safely dispose of plastics.

Surface Air Temperatures: According to its website, the international journal, Sensors:

“is the leading international, peer-reviewed, open access journal on the science and technology of sensors. Sensors is published semimonthly online by MDPI. The Polish Society of Applied Electromagnetics (PTZE), Japan Society of Photogrammetry and Remote Sensing (JSPRS), Spanish Society of Biomedical Engineering (SEIB) and International Society for the Measurement of Physical Behaviour (ISMPB) are affiliated with Sensors and their members receive a discount on the article processing charges.”

It published an article on error in Liquid in Glass (LiG) thermometers by Patrick Frank, Scientific Staff Emeritus, SLAC National Accelerator Laboratory, Stanford University, Menlo Park, CA.
SLAC National Accelerator Laboratory was originally named the Stanford Linear Accelerator Center and is a Department of Energy funded research and development center operated by Stanford University. The publication draws into question the value of global surface air-temperature records used by the UN Intergovernmental Panel on Climate Change and its followers.

The abstract is complex. Fortunately, Frank wrote an easier to understand description of his work in Watts Up With That. At the beginning of his essay, he states:

*LiG Metrology... (hereinafter LiG Met.) returns instrumental methods to the global air temperature record. A start-at-rock-bottom 40 years overdue forensic examination of the liquid-in-glass (LiG) thermometer.*

*The essay is a bit long and involved. But the take-home message is simple:*  
*The people compiling the global air temperature record do not understand thermometers. The rate or magnitude of climate warming since 1900 is unknowable.* [Boldface added]

Frank goes through a careful analysis from the beginning of the use of surface air-temperature data to claim [a false] global temperature. As he states:

“*Air temperature had become central. What was its message? To find out, the reliability of the surface air temperature record should have been brought to the forefront. But it wasn’t. Air temperature measurements were accepted at face value.*”  
[Boldface added]

Frank goes through errors found in instruments as well as errors in observers reading these instruments. Importantly, Frank goes through various statistical tests that show that the errors have a bias, that is errors are not randomly distributed For example in section II.2.1 he states:

“*Sea-Surface Temperature measurement error is not random: Differencing simultaneous bucket-bucket and bucket-engine-intake measurements again yields the measurement error difference, De2,1. If measurement error is random, a large SST difference data set, De2,1, should have a normal distribution.*” [Boldface italics in original]

This is not to say that the bias is intentional. It is to say that it exists, rendering the data of little value unless the bias is corrected. Frank concludes:

“*V. The verdict of instrumental methods:* [Italics in original]

*Inventory of error and uncertainty in the published air temperature record:*  
*NASA/GISS:* incomplete spatial coverage, urban heat islands, station moves.  
*Hadley Centre/UEA Climate Research Unit:* random measurement error, instrumental or station moves, changes in instrument type or time-of-reading, sparse station data, urban heat island, bias
due to changes in sensor exposure (screen type), bias due to changes in methodology of SST measurements.

**Berkeley Earth:** non-climate related noise, incomplete spatial coverage, and limited efficacy of their statistical model.

No mention by anyone of anything concerning instrumental methods of analysis, in a field completely dominated by instruments and measurement.

Instead, one encounters an analysis conveying no attention to instrumental limits of accuracy or to the consequences attending their technical development, or of their operational behavior. This, in a field where knowledge of such things is a pre-requisite. [Boldface added]

**Those composing the air temperature record display no knowledge of thermometers. Perhaps the ultimate irony.** [Boldface added]

No appraisals of LiG thermometers as instruments of measurement despite their preponderance in the historical temperature record. Nothing of the very relevant history of their technical evolution, of their reliability or their resolution or detection limits.

Nothing of the known systematic field measurement errors that affect both LiG thermometers and their successor temperature sensors.

One might expect those lacunae from mathematically adept science dilettantes, who cruise shallow numerical surface waters while blithely unaware of the instrumental depths below; never coming to grips with the fundamentals of study. But not from professionals.

We already knew that climate models **cannot support any notion of a torrid future.** Also, **here,** and [here](#). We also know that **climate modelers do not understand physical error analysis.** Predictive reliability: a mere bagatelle of modern modeling?

Now we know that the air temperature record cannot support any message of unprecedented warming. Indeed, almost no message of warming at all.

**And we also now know that compilers of the air temperature record evidence no understanding of thermometers, incredible as that may seem.** Instrumental methods: a mere bagatelle of modern temperature measurement? [Boldface added]

The climate effects of our CO2 emissions, if any, are invisible. **The rate or magnitude of the 20th century change in air temperature is unknowable.** [Boldface added]

With this study, nothing remains of the IPCC paradigm. Nothing. It is empty of content. It always was so, but this truth was hidden under the collaborative efforts of administrative embrace, partisan shouters, character assassins, media propagandists, and professional abeyance.

All those psychologists and sociologists who published their profoundly learned insights into the delusional minds, psychological barriers, and inadequate personalities plaguing their notion of climate/science deniers are left with egg on their faces or in their academic beards. In their professional acuity, they inverted both the order and the perceivers of delusion and reality.
We’re faced once again with the enormity of contemplating a science that has collapsed into a partisan narrative, partisans hostile to ethical practice.

And the professional societies charged with embodying physical science, with upholding ethics and method — the National Academies, the American Physical Society, the American Institute of Physics, the American Chemical Society — collude in the offense. Their negligence is beyond shame.” [Boldface are links in the original]

See links under Challenging the Orthodoxy and https://www.mdpi.com/journal/sensors

Never Ending: The US Senate foolishly approved the Montreal Protocol in 1987 making it a US treaty on claim that Chlorofluorocarbons (CFCs) were causing depletion of the ozone layer, which protects humans from ultraviolet radiation. The physical evidence was highly questionable in that it was found in laboratory experiments, but not in the atmosphere, and “ozone depletion” was not supported by any measurements showing an increase in ground-level ultraviolet. Since then, internationalists have made great efforts to expand the Montreal Protocol to include other chemicals such as hydrofluorocarbons (HFCs) for their “global warming potential.”

On September 21, 2022, the Senate voted 69 to 27, to ratify the so-called Kigali amendment that calls for a phase down of HFCs, which are used for heating, ventilation, air conditioning and refrigeration. Such actions cost consumers significantly.

Feeding on such success, the UN and other groups are trying to expand the definitions of the Montreal Protocol to include other gases, to “save the world” from global warming.

In a paper using the HITRAN database, Atomic, Molecular and Optical (AMO) physicists W. A. van Wijngaarden and W. Happer refute the claims that halogenated gases cause significant warming.

“HITRAN is an acronym for high-resolution transmission molecular absorption database. HITRAN is a compilation of spectroscopic parameters that a variety of computer codes use to predict and simulate the transmission and emission of light in the atmosphere.”

As stated in the press release: [Figures not shown here]

“The paper examines the warming potential of 14 halogenated gases, which are more specifically identified as hydrochlorofluorocarbons (HCFCs) and hydrofluorocarbons (HFCs). The gases are to be phased out as refrigerants because of their purported threat of dangerously warming the climate. The ban on these chemicals is being imposed under amendments to a 1987 international agreement known as the Montreal Protocol, which forced the abandonment of freon as a refrigerant because of concerns about that chemical’s capacity to destroy ozone in the upper atmosphere. The U.S. Senate ratified the so-called Kilgali amendment to the Montreal Protocol in 2022.

Drs. Van Wijngaarden and Happer conclude that the 14 gases’ contribution to atmospheric warming amounts to only 0.002 degrees C per decade, a warming indistinguishable from zero.”

The summary of the paper states:
This study computed the global warming potentials [GWP] which are comparable to those found by the IPCC2021 as shown in Table 5. [Not shown here] It also evaluated the forcing power per molecule defined as the derivative of the radiative forcing of a gas with respect to its column density. The advantage of the per-molecule forcing power [see paper for reference] is that unlike the GWP it enables one to quickly estimate the relative warming caused by a concentration change of a greenhouse gas. The forcing power strongly depends on the gas concentration. At very low concentrations, all gases have an optically thin power on the order of 10−21 [ten to the minus 21st power] W per molecule. Table 3 shows the forcing power per molecule of the halogenated gases decreases slightly at higher gas concentrations. However, for the 5 main greenhouse gases which have much higher gas concentrations, the forcing power per molecule decreases by orders of magnitude. [Powers of 10] The relative radiative forcing change caused by a change in the concentration of each gas is given in Table 4. Most of the total radiative forcing change is caused by increases in CO2 (83%), CH4 (8%) and N2O (6%). The radiative forcing change due to the 14 halogenated molecules is only 2% of the total. Assuming the temperature change due to a changing gas concentration is proportional to its radiative forcing change, the halogenated gases are responsible for a surface warming of 0.002 C per decade compared to the total observed warming of about 0.1 C per decade.

The reference is to “Nitrous Oxide and Climate.” The paper examines the increase in radiative forcing for gases that are increasing due to human actions, carbon dioxide (CO2), methane (CH4) and nitrous oxide (N2O). The findings include that:

The second 400 ppm increase of CO2 concentration only increases the forcing by about 59% of the first 400 ppm increase. This “saturation” of the forcing from more CO2 can be seen in Fig. 6. The curves of forcing versus greenhouse gas concentration droop downward, especially for CO2 and water vapor, H2O, and to a lesser extent, for CH4 and N2O. There is a “law of diminishing returns” for forcing increases from increasing concentrations of greenhouse gases.

Further, the paper includes a graph (Figure 8) of the midlatitude forcing increments at the tropopause from continued increases of CO2, CH4 and N2O at the current rates for the next 50 years.

The projected forcings are very small compared to the current tropospheric forcing of 137 W m−2 [per square meter]. The temperature-increase contours correspond to the average warming of the past few decades, 0.01 C y−1. The total forcing rate (warming rate) is approximately 85% from CO2, 9% from CH4 and 6% from N2O.

In short, the claims that nitrous oxide (from fertilizer) and methane (from livestock) will cause dangerous global warming are based on very weak evidence. In light of the weak evidence for actual decline in ozone in the atmosphere, the US Senate action in passing the Montreal Protocol is sad, so are the false claims of the promoters of the Montreal Protocol and its offspring. See links under Challenging the Orthodoxy, Expanding the Orthodoxy and https://hitran.org/

**************************

Limitations to Greenhouse Effect: The above gives a description of the importance of understanding the concentrations of various greenhouse gases and how they may significantly change the values of the greenhouse effect once the interaction is accounted for. To understand the total greenhouse effect, one must develop a curve for all frequencies of infrared radiation emitted (the Planck curve for blackbody radiation at a particular temperature in K) which is smooth and
subtract the calculations for radiation emitted from the top of the atmosphere (the jiggered Schwarzschild curve that can only be obtained from observations. As AMO physicist Howard Hayden wrote, cited in the May 27 TWTW:

“Absorption of IR [infrared radiation] is not a one-and-done process. The energy absorbed by the molecule results in an excited vibrational/rotational state. The molecule can radiate the energy away as IR or can lose the energy to heat by collision with atmospheric molecules, primarily N2 [Nitrogen molecule] and O2 [Oxygen molecule].

“The total energy remains constant, but the number of photons – particles of light – does not. A photon absorbed by a molecule (or anything else) is gone forever. When a photon is emitted, it does not come from a warehouse of photons. It springs into existence and transports energy away from the source. It makes no sense to say that a molecule “re-radiates IR” because that expression implies that the molecule somehow stored the photon. The correct word is radiates. “In our atmosphere composed mostly of nitrogen (N2) and oxygen (O2), neither of which interacts with IR, the greenhouse gas molecules are bombarded with IR emanating from the surface. If one absorbs an IR photon, the molecule reacts by wiggling and rotating, having been kicked into one of a plethora of excited rotational/vibrational states. It can shed that excess energy by radiation and return to its ground state, but it is more likely that the energy will be shed by a collision with another molecule. A molecule has such encounters millions of times per second. But the collisions can also kick the greenhouse molecule into an excited state from which it can radiate IR or lose the excess energy by collision.

“Such collisions happen so frequently that in any locality in the atmosphere, there is thermodynamic equilibrium in which a few percent of the molecules are in excited states. The actual percentage depends on the local temperature. So, in every region of the atmosphere, there is some IR being emitted and some IR being absorbed, overall, in random directions.

“The theoretical approach to determining the IR emitted to space is therefore to combine knowledge of the known spectral properties of the GHG molecules, account for the latitude and altitude, and track the IR flux upward. At sufficiently high altitude, a good fraction of the IR can escape to outer space because of the low density of the air and its GHGs. For CO2, and for some of the spectrum absorbed by H2O, that atmosphere is so high that the temperature is about minus 50°C (minus 65°F). [This causes a big spike in the graph at 15-micrometers].

“This discussion has been a bit long and involved, but it comes with a very important lesson. The IR that goes to space balances the heat input from the Sun and can only be calculated by accounting for the properties of greenhouse gases. Were there not interactions with GHGs, the IR from the surface would go directly to space. The spectrum [observed by satellites] would be identical to that of blackbody radiation from the surface, both in shape and in quantity.

“Importantly, there is no way to use pure thermodynamics, the lapse rate [decrease in temperature with altitude], fluid-flow equations, variations in cloud cover, weather patterns, ocean dynamics, temperature trends, or any combinations of such information to explain the spectrum of IR that goes to space.” [Boldface added]

Consequently, those who claim that global climate models are based on “first principles” do not include some modern physics. The concepts stated in boldface above are part of classic physics, which includes the wave theory of light. But the concepts expressed by Planck and Schwarzschild
came later and are part of what developed in the 1930s as Quantum Physics which includes particle-wave duality of electromagnetic energy. See http://www.sepp.org/twtwfiles/2023/TWTW%205-27-23.pdf

**********

**Sa**

**hara Wet? In Climate, History, and the Modern World (2nd edition, 1982), H.H. Lamb discusses how the climate of northern Africa has changed since the end of the last ice age and that during the warmest post-glacial times the Sahara was moist. He suggests that the current desert belt extending eastward across China may have been moist as well.

The June 2, 2012, TWTW discusses the Harappan Civilization in the Indus Valley around 3000 to 3900 years ago which had sewer systems with running water. The movement of rain patterns suggests movement of the Intertropical Convergence Zone (ITCZ) as discussed by Jim Steele in “How the Sun and Intertropical Convergence Zone (ITCZ) Controlled Climate and Civilization Collapses” and in the 2008 NIPCC Report on the findings in a cave in Oman covering 9600 to 6200 BP suggesting a shift in the ITCZ may be from changing cosmic rays (Svensmark Hypothesis).

Writing in No Tricks Zone, Kenneth Richards brings attention to a report on African Holocene Humid Period in the Tibesti mountains (central Sahara, Chad). The Tibesti Mountains are in Northwest Chad extending into Libya. The abstract of the paper states:

“The climate of the African Holocene Humid Period (AHHP) is reconstructed in the Tibesti Volcanic Massif (TVM) in the central Sahara from well-preserved diatomaceous deposits in the two crater palaeolakes of Trou au Natron at Pic Toussidé and Era Kohor at Emi Koussi. The two records cover the period from ~9500 to 4500 cal yr BP.”

“This timing of the AHHP in the mountainous Tibesti is consistent with the aridification of the central Sahara recorded at lowland sites, which has mainly been related to the southward retreat of the Intertropical Convergence Zone (ITCZ) and the associated African monsoonal rainfall belt, following the gradually declining summer insolation that led to the termination of the AHHP. Our results prove the existence of Holocene lakes in the TVM craters that developed contemporaneously with the lakes of the Chadian basin and the Libyan Sahara. On a broader scale, our data share similar hydroclimatic patterns with studies from the eastern and northern Sahara.”

The claims of the UN IPCC of understanding climate change are not satisfactory unless it can explain such examples of climate change. See links under Challenging the Orthodoxy – NIPCC, Changing Climate, http://www.sepp.org/twtwfiles/2012/TWTW%20-%206-2-12.pdf, and https://perhapsallnatural.blogspot.com/search?q=ITCZ for Steele’s essay.

**********

**Hitting the Wall:** Former Economics Professor at the University of Edinburgh and advisor to the World Bank Gordon Hughes writes in Net Zero Watch:

“The whole justification for the falling costs of wind generation rested on the assumption that much bigger turbines would produce more output at lower capex cost per megawatt, without the large costs of generational change. Now we have confirmation that such optimism is entirely unjustified – the whole development process has been a case of too far, too fast. Again, this was both predictable and predicted. The idea that wind turbines are immune to the factors that affect other types of power engineering was always absurd.”
Unless there is a remarkable shift in government policy, things will get very ugly in the UK and other jurisdictions that continue with the folly that wind and solar are inexpensive alternatives to fossil fuels. See link under Energy Issues – Non-US.

*************************

**Incineration:** Recycling is one of the big follies of European Green. Great quantities of plastics are shipped to Asia or Africa and wind up in the oceans. Finnish public health official Mikko Paunio, MD, wrote a report for Net Zero Watch, “Microplastics: The Environmental Harms of the Circular Economy.” He finds:

“• New data reveals that up to two million tons of microplastics may be leaking from plastic recycling plants into waterways around the globe.
• Incineration of waste is cheaper and more environmentally friendly than recycling.
• However, the circular economy agenda is preventing its more wide-spread deployment.”

Incineration can be safe, be clean, and generate energy but it is abhorred by the environmental evangelists. See link under Questioning European Green.

*************************

**NO TWTW NEXT WEEK**

Next weekend, SEPP Directors Willie Soon and Ken Haapala will be giving separate talks at the annual meeting of the Doctors for Disaster Preparedness. TWTW will resume the following week.

*************************

**SEPP’S APRIL FOOLS AWARD – THE JACKSON**

SEPP is conducting its annual vote for the recipient of the coveted trophy, The Jackson, a lump of coal. Readers are asked to nominate and vote for who they think is most deserving. Senators Schumer and Manchin won in 2022.

The voting will close on June 30, July 3. Please send your nominee and a brief reason why the person is qualified for the honor to Ken@SEPP.org. The awardee will be announced at the annual meeting of the Doctors for Disaster Preparedness on July 7 to 9.

*************************

**Number of the Week: Air quality 19, Excellent, Temperature minus 106F (minus 77C).** Last week reports claimed that over 100 million Americans were suffering from poor air quality due to fires in Canada. In Washington DC at 3:47 pm on June 30, AccuWeather reported that the Air quality index was 165, Very Unhealthy, Temperature 86F (30C)RealFeel 92, Slightly earlier it was 1:43 AM at Vostok Station. Air quality was 19, Excellent, Temperature minus 106F (RealFeel minus 134F). A single statistic is a poor way of determining healthiness of air for humans. See links under Measurement Issues – Atmosphere.

*************************

**NEWS YOU CAN USE:**

*Censorship*

**Australia Advances Draft “Disinformation” Free Speech Lockdown Laws**

By Eric Worrall, WUWT, June 26, 2023

[SEPP Comment: Is Disinformation any facts contradicting the false wisdom of government policy?]

To condition people to censor themselves…
By Jo Nova, Her Blog, June 27, 2023

**Challenging the Orthodoxy -- NIPCC**

**Climate Change Reconsidered II: Physical Science**
Idso, Carter, and Singer, Lead Authors/Editors, Nongovernmental International Panel on Climate Change (NIPCC), 2013
https://www.heartland.org/media-library/pdfs/CCR-II/CCR-II-Full.pdf
Summary: https://www.heartland.org/_template-assets/documents/CCR/CCR-II/Summary-for-Policymakers.pdf

**Climate Change Reconsidered II: Biological Impacts**
Idso, Idso, Carter, and Singer, Lead Authors/Editors, Nongovernmental International Panel on Climate Change (NIPCC), 2014
http://climatechangereconsidered.org/climate-change-reconsidered-ii-biological-impacts/
Summary: https://www.heartland.org/media-library/pdfs/CCR-IIb/Summary-for-Policymakers.pdf

**Climate Change Reconsidered II: Fossil Fuels**
By Multiple Authors, Bezdek, Idso, Legates, and Singer eds., Nongovernmental International Panel on Climate Change, April 2019
http://store.heartland.org/shop/CCR-ii-fossil-fuels/
Download with no charge:

**Why Scientists Disagree About Global Warming**
The NIPCC Report on the Scientific Consensus
By Craig D. Idso, Robert M. Carter, and S. Fred Singer, Nongovernmental International Panel on Climate Change (NIPCC), Nov 23, 2015
http://climatechangereconsidered.org/
Download with no charge:

**Nature, Not Human Activity, Rules the Climate**
S. Fred Singer, Editor, NIPCC, 2008

**Global Sea-Level Rise: An Evaluation of the Data**
By Craig D. Idso, David Legates, and S. Fred Singer, Heartland Policy Brief, May 20, 2019
https://www.heartland.org/_template-assets/documents/publications/SeaLevelRiseCCRII.pdf

**Challenging the Orthodoxy**
The Verdict of Instrumental Methods
Scientific Paper Concludes Refrigerants’ Gases Pose No Threat to Climate
By Staff, CO2 Coalition, June 28, 2023
Link to paper: Instantaneous Clear Sky Radiative Forcings of Halogenated Gases
By W. A. van Wijngaarden and W. Happer, June 26, 2023

Nitrous Oxide and Climate
By C. A. de Lange, J. D. Ferguson, W. Happer, and W. A. van Wijngaarden, October 28, 2022
https://wvanwijngaarden.info.yorku.ca/files/2022/10/Nitrous-Oxide-FINAL-1.pdf?x45936

Anniversary Issue: the Crichton CalTech Michelin Lecture
By Kip Hansen, WUWT, June 26, 2023
From: Aliens Cause Global Warming By Michael Crichton, Jan 17, 2003
“The late Philip Handler, former president of the National Academy of Sciences, said that
‘Scientists best serve public policy by living within the ethics of science, not those of politics. If
the scientific community will not unfrock the charlatans, the public will not discern the
difference—science and the nation will suffer.’ Personally, I don’t worry about the nation. But I
do worry about science.”

The Green Movement and Energy Prices: The Theory Of “Effective Pain”
By Tilak Doshi, WUWT, June 25, 2023

Defending the Orthodoxy – Bandwagon Science
Andrew Dessler on Texas Heat: Vague but Exaggerated
By Robert Bradley Jr. Master Resource, June 29, 2023

The fall of Rome
By John Robson, Climate Discussion Nexus, June 28, 2023
https://climatediscussionnexus.com/2023/06/28/the-fall-of-rome/
“In 2021, Rome’s city council voted on a plan to achieve a 51 percent reduction of greenhouse
gas emissions by 2030. The Office for the Climate is working to present an adaptation strategy by
next fall.”
[SEPP Comment: To stop the Tiber from flooding?]
Questioning the Orthodoxy
Digging Deeper Into Climate Change
By Fred Lipfert, ACSH, June 19, 2023
“CO2 concentrations in exhaled breath are significantly higher than inhaled air, typically around 4-5% vs. 0.4%—the increased concentration results from eliminating this “waste gas” produced during our body’s cellular respiration. Annual CO2 exhalation is about 380 kg per person for a global total of about 3 billion metric tons, about 9% of global anthropogenic emissions.”
[SEPP Comment: Save life! Stop breathing!]

When Do We Reach Peak Climate Insanity? It Needs To Be Soon
I & I Editorial Board. June 27, 2023
“In response to our own question, the answer is: as long as there are grifters; status seekers; free market eliminationists; anti-capitalists; socialists; Marxists; busybodies; virtue signalers; and elites who believe resources are running out and they want to reserve what’s left for themselves, the global warming fanaticism will run hot.
“Yet we hope it’s reaching its peak, because we’re weary of all the craziness out there.”

Is Our Freedom of Movement in Peril?
By Levi Russell, Real Clear Energy, June 28, 2023
https://www.realclearenergy.org/articles/2023/06/28/is_our_freedom_of_movement_in_peril_943759.html

June Update. Kidding Ourselves, Temperatures, Corals, and Kings
By Jennifer Marohasy, Her Blog, July 1, 2023
“At the conference in Gympie, I heard lawyer Tom Marland explained the extent of the investment in what is being called the necessary energy transition, with reference to new developments in central Queensland: 10,000 hectares used to be a large solar installation, now they are planning for 100,000; and the wind farms are ten times larger than before, with ridge lines excavated to fit 300 turbines.”

Canadian forest fire burn rates since 1700: Down down down
By John Robson, Climate Discussion Nexus, June 28, 2023

Six Years To Save The Planet, Says King Charles
By Paul Homewood, Not a Lot of People Know That, June 30, 2023
https://notalotofpeopleknowthat.wordpress.com/2023/06/30/six-years-to-save-the-planet-says-king-charles/
“Meanwhile Charlie is making a tidy profit from his climate scare:”

After Paris!
Time to COP a plea
By John Robson, Climate Discussion Nexus, June 28, 2023
“And the main theme of COP28 is that since we can’t get nations to stop emitting GHGs, and we look darn silly getting delegates to promise to again and again and then fly home first-class to make a first-class mess of it, we should demand instead that politicians in industrialized democracies give all their citizens’ wealth to politicians running countries they have mired in political and economic dysfunction.”

Change in US Administrations
Biden: “Existential Threat To Humanity”
By Tony Heller, His Blog, June 30, 2023
https://realclimatescience.com/2023/06/biden-existential-threat-to-humanity/
Brief Video: “Joe Biden says climate change is the most serious threat we face as human beings.”

Social Benefits of Carbon Dioxide
The influence of elevated CO2 and soil nitrogen status on wheat
By John Robson, Climate Discussion Nexus, June 28, 2023
From the CO2Science Archive:

Problems in the Orthodoxy
Hope For Climate Action In China
By Tony Heller, His Blog, June 30, 2023
https://realclimatescience.com/2023/06/hope-for-climate-action-in-china/

India’s Record Aircraft Orders Ignore Climate Goals
By Vijay Jayaraj, CO2 Coalition, June 23, 2023
[SEPP Comment: Will they use biofuels? How much of India’s food harvest would be required?]

Rainforest loss worsened despite global pledge: research
By Zack Budryk, The Hill, June 27, 2023
Link to report: Tropical Primary Forest Loss Worsened in 2022, Despite International Commitments to End Deforestation
By Mikaela Weisse, Elizabeth Goldman and Sarah Carter, World Resources Institute, 2023
“The tropics lost 10% more primary rainforest in 2022 than in 2021, according to new data from the University of Maryland and available on WRI’s Global Forest Watch platform. “Tropical primary forest loss in 2022 totaled 4.1 million hectares, the equivalent of losing 11 football (soccer) fields of forest per minute. All this forest loss produced 2.7 gigatonnes (Gt) of carbon dioxide emissions, equivalent to India's annual fossil fuel emissions. “This increased forest loss comes in the first year after heads of 145 countries vowed in the Glasgow Leaders’ Declaration on Forests and Land Use to halt and reverse forest loss by the end of the decade, recognizing the important role of forests in combating climate change and biodiversity loss. Instead of consistent declines in primary forest loss to meet that goal, the trend is moving in the wrong direction.”
[SEPP Comment: Sue the UN COP?]

Seeking a Common Ground
Thomas Sowell -- Still Relevant at 93
By D. Diego Torres, American Thinker, June 30, 2023
https://www.americanthinker.com/articles/2023/06/thomas_sowell__still_relevant_at_93.html
Video: Thomas Sowell: There Are No Solutions, Only Trade-offs
https://www.youtube.com/watch?v=3_EtIWmja-4&t=3s
“Compared to what? At what cost? What hard evidence do you have?”

Models v. Observations
Climate models behind Net Zero policies are ‘thoroughly flawed’
Crude corrections hide unrealistic physics.
Press Release, Net Zero Watch, June 29, 2023
https://www.netzerowatch.com/climate-models-behind-net-zero-policies-are-thoroughly-flawed/
Link to paper: Climate Models and Climate Muddles
By Willis Eschenbach, Net Zero Watch, 2023

Measurement Issues -- Surface
Exclusive: Three Typhoon Jets Landed Next to Thermometer When Britain’s ‘Record’
Temperature of 40.3°C Was Recorded
By Chris Morrison and Ian Rons, The Daily Sceptic, Via WUWT, June 28, 2023
https://wattsupwiththat.com/2023/06/28/exclusive-three-typhoon-jets-landed-next-to-thermometer-when-britains-record-temperature-of-40-3c-was-recorded/

Coningsby’s Fake Record
By Paul Homewood, Not a Lot of People Know That, June 25, 2023

Cambridge Taken Out Of CET In 1931–Because Of UHI!
By Paul Homewood, Not a Lot of People Know That, June 27, 2023

Measurement Issues -- Atmosphere
How safe is the air? Here’s how to check and what the numbers mean
By Maddie Burakoff, AP, The Hill, June 29, 2023
“The EPA uses this measure to keep tabs on five kinds of air pollutants. The main concern from the wildfire smoke is fine particle pollution, or PM2.5. These particles are tiny enough to get deep into the lungs. They can cause short-term problems like coughing and itchy eyes, and in the long run, can affect the lungs and heart.”

Canadian wildfire smoke spreads, 100 million Americans under air-quality alerts
By Brendan O’Brien, Yahoo, June 29, 2023
**Changing Weather**

*Five things to know about the Texas heat wave*

By Julia Mueller and Julia Shapero, The Hill, June 28, 2023


“Texans have remained wary of the capacity of the state’s isolated electric grid after it failed amid a deadly winter storm in 2021 that claimed more than 200 lives.”

**Why Thunderstorms over the Cascades and Not Over the Lowlands?**

By Cliff Mass, Weather Blog, June 25, 2023


“So why are the mountains favored for thunderstorms and not the lowlands?

“And why were mountain thunderstorms so active this week?

“A key reason is that the air is more unstable over the mountains than over the lowlands.

“Thunderstorms are a form of convection in which air parcels accelerate upwards. A key requirement for convection is a large change in temperature in the vertical. So cooling aloft or warming near the surface helps increase that vertical temperature change (gradient) that promotes convection.”

**Is Washington State on Track for a Severe Fire Season?**

By Cliff Mass Weather Blog, June 28, 2023

https://cliffmass.blogspot.com/2023/06/is-washington-state-on-track-for-severe.html

“Western Washington wildfires inevitably are associated with strong, easterly (from the east) winds occurring at the end of the (normally) dry summer.”

**Changing Climate**

*New Study Finds The Early-Mid Holocene Sahara Had Lakes With Depths Of ‘At Least 300 Meters’*

By Kenneth Richard, No Tricks Zone, June 29, 2023


Link to latest paper: The African Holocene Humid Period in the Tibesti mountains (central Sahara, Chad): Climate reconstruction inferred from fossil diatoms and their oxygen isotope composition

By Abdallah Nassour Yacoub, et al. Quaternary Science Reviews, May 15, 2023


The “Little Ice Age” (LIA) in Europe – particularly Portugal (an attempt at a synthesis)

By Olegário Nelson Azevedo Pereira and Maria Rosário Bastos, Academia Letters, 2021

https://www.academia.edu/61297651/The_Little_Ice_Age_LIA_in_Europe_particularly_Portugal_an_attempt_at_a_synthesis?email_work_card=view-paper

**Changing Climate – Cultures & Civilizations**

*Humans’ evolutionary relatives butchered one another 1.45 million years ago*

By Staff Writers, Washington DC (SPX), Jun 27, 2023

https://www.terradaily.com/reports/Humans_evolutionary_relatives_butchered_one_another_1_45_million_years_ago_999.html

Link to paper: Early Pleistocene cut marked hominin fossil from Koobi Fora, Kenya
By Briana Pobiner, Pante & Keevil, Nature, Scientific Reports, June 26, 2023
https://www.nature.com/articles/s41598-023-35702-7
[SEPP Comment: Examines fossils and calls into question claims that humans killing each other are a product of civilization or European cultures, or recent global warming.]

Changing Seas
Clintel Report: Seeing sense on sea levels
By John Robson, Climate Discussion Nexus, June 28, 2023
https://climatediscussionnexus.com/2023/06/28/clintel-report-seeing-sense-on-sea-levels/

New Study Finds Russian Sea Levels Were 7-9 Meters Higher Than Today From 8000-4000 Years Ago
By Kenneth Richard, No Tricks Zone, June 26, 2023
https://notrickszone.com/2023/06/26/new-study-finds-russian-sea-levels-were-7-9-meters-higher-than-today-from-8000-4000-years-ago/
Link to paper: Reconstruction of relative sea-level changes based on a multiproxy study of isolated basins on the Onega Peninsula (the White Sea, northwestern Russia)
By Yury Kublitskiy, et al. Quaternary International, January 2023
[SEPP Comment: The apparent sea level fall may be from the earth in that region rebounding from the last Ice Age]

Changing Cryosphere – Land / Sea Ice
No evidence polar bears survived Eemian warmth because they were not yet fully ice-dependent
By Susan Crockford, Polar Bear Science, June 26, 2023
https://polarbearsscience.com/2023/06/26/no-evidence-polar-bears-survived-eemian-warmth-because-they-were-not-yet-fully-ice-dependent/
“For polar bears, the question is this: could brown bears (aka grizzlies) have survived for hundreds of thousands of years living in a completely different habitat—the perpetually-frozen world of Arctic sea ice—before significant biological changes took place? I contend the answer is no.”

Changing Earth
The Earth’s Decadal Rotation and Climate Dynamics
By Richard Mackey, Science of Climate Change, May 15, 2023
From abstract: “Several oscillating atmospheric/oceanic systems (e.g., the El Niño/Southern Oscillation, Quasi-Biennial Oscillation, Pacific Decadal Oscillation, and North Atlantic Oscillation) are largely responsible for the Earth’s weather and climate.”

Humans pump so much groundwater that Earth’s axis has shifted, study finds
By Mindy Weisberger, CNN, June 26, 2023
Link to paper: Drift of Earth's Pole Confirms Groundwater Depletion as a Significant Contributor to Global Sea Level Rise 1993–2010
By Ki-Weon Seo, et al, Geophysical Research Letters, June 15, 2023
The most notable driver of long-term variations in the rotational axis was already known to be mantle flow — the movement of molten rock in the layer between Earth’s crust and outer core. The new modeling reveals that groundwater extraction is the second most significant factor, [lead study author] Seo said.

**Dutch to shut Europe's biggest gas field after quakes**
By Danny Kemp, The Hague (AFP) June 23, 2023
https://www.energy-daily.com/reports/Dutch_to_shut_Europes_biggest_gas_field_after_quakes_999.html

**Lowering Standards**
Is NASA's Scientific Visualization Studio Scientific?
By Kip Hansen, WUWT, June 26, 2023
https://wattsupwiththat.com/2023/06/27/is-nasas-scientific-visualization-studio-scientific/

**NOAA Goes Full Orwell with Climate Propaganda Seminar**
By Charles Rotter, WUWT, June 28, 2023

**New hurricane center director: Warming climate to worsen storm surge**
By Thomas Leffler, Accuweather.com, UPI, June 22, 2023 [H/t William Readdy]

“He held that role for about a decade, but his expertise and skill quickly helped the North Carolina State University graduate climb the ladder, as he became the hurricane specialist unit's branch chief in 2018. While holding this position, he supervised the agency’s hurricane forecasters during some of the busiest hurricane seasons on record, such as the hyperactive 2020 season.” [Boldface added]
[SEPP Comment: Expect more hyper-language?]

**Alice in Climateland**
By John Robson, Climate Discussion Nexus, June 28, 2023

“National Geographic attempts to explain ‘Why we’ll begin naming heat waves’ in an email that links to a story ‘GET READY FOR HEAT WAVE ALICE’. Which they just invented, along with much more besides.”

**Met Office & Porthmadog**
By Paul Homewood, Not a Lot of People Know That, June 30, 2023
https://notalotofpeopleknowthat.wordpress.com/2023/06/30/met-office-porthmadog/

“It’s not often I am lost for words!”
“Class 4 sites certainly are not acceptable sites for climatology, nor for that matter are Class 3 ones. As the WMO notes, they can have up to 2C of uncertainty.
“It is bad enough that the Met Office is using this site. But it is even worse that they know about the issues, but still plan to carry on doing so.
“How many other weather stations are of such poor quality?”
**Tidbits**
By John Robson, Climate Discussion Nexus, June 28, 2023
[https://climatediscussionnexus.com/2023/06/28/tidbits-20/](https://climatediscussionnexus.com/2023/06/28/tidbits-20/)

“Actually, things promptly improved, despite a *Guardian* headline ‘Canada is on fire, and big oil is the arsonist’. (And the *Atlantic’s* ‘Weekly Planet’ asks via email ‘What is wildfire smoke doing to our brains?’ to which we respond that whatever it is you’d better try to make it stop.)”

---

**Communicating Better to the Public – Use Yellow (Green) Journalism?**

**Climate Journalism is Broken**
A new paper reveals troubling biases
By Roger Pielke, Jr. The Honest Broker, June 26, 2023
[https://rogerpielkejr.substack.com/p/climate-journalism-is-broken#:~:text=In%202020%2C%20scholars%20published%20more,biases%20in%20coverage%20of%20climate.](https://rogerpielkejr.substack.com/p/climate-journalism-is-broken#:~:text=In%202020%2C%20scholars%20published%20more,biases%20in%20coverage%20of%20climate.)

Link to paper: [The climate change research that makes the front page: Is it fit to engage societal action?](https://www.sciencedirect.com/science/article/pii/S0959378023000419?via%3Dihub)

**China The Renewables Leader? Do Your Homework, Guardian**
By Paul Homewood, Not a Lot of People Know That, June 30, 2023

---

**Communicating Better to the Public – Use Propaganda**

**Record Heat In Morocco**
By Tony Heller, His Blog, June 30, 2023

---

**Expanding the Orthodoxy**

**Aussie, Canada and NZ Climate Ministers: Send Money**
By Eric Worrall, WUWT, June 25, 2023

---

**Hydrofluorocarbons, Climate, and Health — Moving the Montreal Protocol beyond Ozone-Layer Recovery**
By Ashley Woodcock, M.D. The New England Journal of Medicine, June 24, 2023

“The Montreal Protocol has been rapidly responsive to evolving science and has sought to deliver its benefits to low-income countries. It has protected the ozone layer and climate by phasing down CFCs. It now has to repeat the trick, and with renewed urgency. HFC phasedown is projected to deliver 0.3 to 0.5 degrees of climate benefit by 2100.”

[SEPP Comment: Another example of failure to understand the different effects of different greenhouse gases and how and where Ozone is formed.]

---

**Private Jets Keep Green Light As WEF Pushes To Remove 75% Of All Cars In Just 27 Years**
By P Gosselin, No Tricks Zone, June 24, 2023
[SEPP Comment: What’s one or two hundred private jet flights when one is saving the world by banning the use of fossil fuels?]

**Questioning European Green**

*Microplastics: The Environmental Harms of the Circular Economy*
By Mikko Paunio, GWPF, 2023
[https://www.thegwpf.org/content/uploads/2023/06/Paunio-Microplastics.pdf](https://www.thegwpf.org/content/uploads/2023/06/Paunio-Microplastics.pdf)

**Square circular economics**
By John Robson, Climate Discussion Nexus, June 28, 2023
[https://climatediscussionnexus.com/2023/06/28/square-circular-economics/](https://climatediscussionnexus.com/2023/06/28/square-circular-economics/)

“One major red flag in any reform movement is if they try to reinvent economics without knowing what it said before. Such as the new enthusiasm for ‘circular economics’ where things are not wasted, as opposed to the old free market system where, driven by the relentless logic of profit and loss, entrepreneurs tried desperately not to waste anything.”

**Europe’s Crisis: Blame Green Energy Policy**
By Steve Goreham, Master Resource, June 28, 2023

“The lesson from Europe is that reliance on wind, solar, and imported natural gas is expensive and risky energy policy. If you experience a low-wind year, a cold winter, an embargo, or a war, you can’t turn up the wind and solar.”

**Questioning Green Elsewhere**

*IEA’s Net Zero Dream Was Just Debunked as a Nightmare*
By Daniel Turner, Real Clear Energy, June 29, 2023
[https://www.realclearenergy.org/articles/2023/06/29/ieas_net_zero_dream_was_just_debunked_as_a_nightmare_944050.html](https://www.realclearenergy.org/articles/2023/06/29/ieas_net_zero_dream_was_just_debunked_as_a_nightmare_944050.html)

“Give Biden credit for one thing: he has been honest about his intentions.”

**A world leader in bad economics**
By John Robson, Climate Discussion Nexus, June 28, 2023

“But those in power still mistake destroying jobs for creating them; the story continues ‘‘Read the legislation,’ Labour Minister Seamus O’Regan told reporters. ‘What we’re talking about here is making sure workers aren’t left behind.’” By substituting fake economic activity for the real kind and paying for it with fake money. What could go wrong?”

“As [National Post columnist] Lorne Gunter complained, the government in ringing in this bill completely ignored Smith’s stated concerns. And moreover ‘the legislation is nothing more than environmental evangelism. It is not based on real-world economics. It has no connection to what is possible and practical.’” [Boldface added]

**Economic Implications of a Phased-in EV Mandate in Canada**
By Ros McKitrick, Working paper, 2023
[https://ideas.repec.org/p/gue/guelph/2023-01.html](https://ideas.repec.org/p/gue/guelph/2023-01.html)

**Funding Issues**
World Now Wasting $1 Trillion Or More Per Year Investing In Useless "Renewables"
By Francis Menton, Manhattan Contrarian, June 29, 2023
https://www.manhattancontrarian.com/blog/2023-6-29-world-now-wasting-more-than-1-trillion-per-year-on-investing-in-useless-renewables

The Deficit Reduction Act
By Tony Heller, His Blog, June 30, 2023
https://realclimatescience.com/2023/06/the-deficit-reduction-act/

Litigation Issues
Editors: Multnomah County’s lawsuit filing does not count as governance
By Editorial Board, The Oregonian, Updated: Jun. 25, 2023 [H/t Kathleen Worman]

"While Multnomah County should not forget or dismiss the 69 lives lost in the 2021 heat wave, we also should not forget or dismiss the 193 homeless people who died that same year. Ninety-six of those deaths were related to drug or alcohol consumption; 18 due to homicide; and five were attributed in whole or in part to the heat dome, according to the county’s Domicile Unknown report.

"Who should the county sue for those other losses?"

Held v Montana
Montana’s AG betrayed conservatives
By Ed Berry, His Blog, June 27, 2023
https://edberry.com/blog/climate/climate-law/held-v-montana/

'I cried like 10 times': Bozeman plaintiffs reflect on youth climate trial
By Isabel Hicks, Bozeman Daily Chronical, June 24, 2023 [H/t Paul Nachman]

"Claire Vlases, 20, joined the lawsuit when she was 17. Frustrated with a lack of results from her environmental advocacy work and also unable to vote, when Vlases heard of the Our Children’s Trust case she knew she wanted to be a part of it.”

[SEPP Comment: Don’t ask anyone involved to explain the greenhouse effect and its limitations.]

Cap-and-Trade and Carbon Taxes
Does the Government understand its own Green Levies?
By John Constable, Net Zero Watch, June 28, 2023

"...the government is silently reapplying the cost of green levies to domestic consumer energy bills, reversing the decision taken under the Truss government to fund these costs from general taxation.”

Brits have already paid £15,500 towards Net Zero without realising
By Paul Homewood, Not a Lot of People Know That, June 29, 2023

French President Suggests Taxing America to Save the European Green Energy Dream
Energy Issues – Non-US

BP Energy Review 2022
By Paul Homewood, Not a Lot of People Know That, June 27, 2023
https://notalotofpeopleknowthat.wordpress.com/2023/06/27/bp-energy-review-2022/
Link to: Statistical Review of World Energy, 2023
By Staff, Energy Institute, 2023
“In essence nothing has changed year-on-year. Although renewable energy output has risen by
13%, its share of total energy has only gone from 1.5% to 1.7% (in contrast to EuroNews’
Attempts to fool readers with claims of an increase of a whopping 266 gigawatts)”

Despite the green revolution, and record energy use, the world still runs on 82% fossil fuels
By Jo Nova, Her Blog, June 28, 2023
still-runs-on-82-fossil-fuels/
“To put the historic size of the “Renewable Energy Transition” into focus, here’s the last century
of energy transformation. The Energy Institute did not seem to want to highlight the
insignificance of renewable energy, so I created this from the OWID myself.”

The £200 Billion Bill For Upgrading The Grid For Net Zero
By Paul Homewood, Not a Lot of People Know That, June 24, 2023
https://notalotofpeopleknowthat.wordpress.com/2023/06/24/the-200-billion-bill-for-upgrading-
the-grid-for-net-zero/
“Billions have already been spent integrating wind power into the grid. But that is a drop in the
ocean to what is now needed:”

Wind costs will remain high
By Gordon Hughes, Net Zero Watch, June 26, 2023
https://www.netzerowatch.com/siemens-and-wind-costs/

Government Climate Advisor: Britain is No Longer a Climate Leader
By Eric Worrall, WUWT, June 28, 2023
https://wattsupwiththat.com/2023/06/28/government-climate-advisor-britain-is-no-longer-a-
climate-leader/

Deben Throws His Toys Out Of The Pram Again
By Paul Homewood, Not a Lot of People Know That, June 28, 2023
https://notalotofpeopleknowthat.wordpress.com/2023/06/28/deben-throws-his-toys-out-of-the-
pram-again/
“The Climate Change Committee (CCC) described government efforts to scale up climate action
as ‘worryingly slow’.”

Energy Issues – Australia
Aussie Government Admits the Green Energy Revolution will Require Lots of Coal
By Eric Worrall, WUWT, June 27, 2023
“The reality is nobody knows where the minerals required for clean energy targets will come from. In 2019 Foreign Policy analysed what would be required, one of the requirements was a 2000% increase in Lithium production: \( (2050 - 2023) \times 2000\% = 540 \) years’ worth of current Lithium production to hit Net Zero by 2050.”

**Energy Issues -- US**

Green madness: You’d have to burn a pizza stove 849 years to equal one year of John Kerry’s private jet
By Marc Morano, New York Post, June 26, 2023
“New Yorkers have already endured former Mayor Michael Bloomberg’s attempts to ban soda sales of over 16 ounces for their own good and are facing Gov. Kathy Hochul’s gas stove and furnace bans in the state, all in the name of climate change.
“And now, another one bites the crust as New York City officials are going after pizzerias using the century-old cooking methods, citing the ovens’ allegedly excessive carbon emissions.”

Mama Mia! NYC rules crack down on coal-, wood-fired pizzerias — must cut carbon emissions up to 75%
By Carl Campanile and Kevin Sheehan, New York Post, June 25, 2023 [H/t WUWT]

Washington Gas Prices Now Highest in U.S. as Experts Point to New Climate Legislation
Isabella Breda / The Seattle Times (TNS), June 22, 2023 [H/t Bernie Kepshire]
“Washington unseated California this week as the state with the most expensive gasoline.”

**Washington’s Control of Energy**

We Must Remove All Barriers to Oil and Gas Pipelines
By Pinar Cebi Wilber, Real Clear Energy, June 29, 2023
https://www.realclearenergy.org/articles/2023/06/29/we_must_remove_all_barriers_to_oil_and_gas_pipelines_943404.html
“Today, the U.S. is a major exporter in global markets thanks to an abundance of natural gas supply, brought about by advancements in fracking technologies.”

**Oil and Natural Gas – the Future or the Past?**

Norway Approves £18 Bn Of Oil & Gas Projects
By Paul Homewood, Not a Lot of People Know That, June 29, 2023

**Nuclear Energy and Fears**

U.S. Nuclear Reactors: Firing Up Vogtle 3 And 4
By Doctor Y, ACSH, June 20, 2023
“As a result, the Gen III and III+ reactors are  
- simpler in design  
- designed to last for at least 60 years  
- employ safety features that take into account lessons learned from the Three Mile Island and Fukushima accidents.  
“This last point – enhanced reactor safety features – warrants additional discussion.”

**Alternative, Green ("Clean") Solar and Wind**

**NSU perovskite solar cells set new record for power conversion efficiency**
By Staff Writers, Singapore (SPX) Jun 23, 2023

https://www.energy-daily.com/reports/Perovskite_solar_cells_invented_by_NUS_scientists_set_new_world_record_for_power_conversion_efficiency_999.html

Link to table: Solar cell efficiency tables (version 62)
By Martin A. Green, et al, Progress in Photovoltaics, June 21, 2023

“Perovskite solar cells designed by a team of scientists from the National University of Singapore (NUS) have attained a world record efficiency of **24.35%** with an active area of 1 cm2. This achievement paves the way for cheaper, more efficient and durable solar cells.”

“Prior to the record-breaking feat by the NUS team, the best 1-cm2 perovskite solar cell recorded a power conversion efficiency of **23.7%**.” [Boldface added]

(SEPP Comment: Wow! 0.65 percentage points!]

**Huge Nebraska Solar Park Completely Smashed To Pieces By One Single Hail Storm!**
By P Gosselin, No Tricks Zone, June 28, 2023


Link to local paper: Baseball-Sized Hail Smashing Into Panels At 150 MPH Destroys Scottsbluff Solar Farm

By Kevin Killough, Cowboy State Daily June 27, 2023


(SEPP Comment: Arial photo gives an idea of the extent of damage.

**Wind Fails Texas Again**
By Bill Peacock, Master Resource, June 26, 2023

https://www.masterresource.org/uncategorized/wind-fail-june-2023/

**Still Waiting For The Magical Future Of Free Wind Power**
By Francis Menton, Manhattan Contrarian, June 26, 2023

https://www.manhattancontrarian.com/blog/2023-6-26-still-waiting-for-the-magical-future-of-free-wind-power

“In the short run, don’t expect the climate doom cult to walk away from any of their grand plans. The immediate answer will be more, and still more government subsidies to keep the wind power dream alive. But at some point, this becomes, as they say, unsustainable.”
Offshore Windfarms Threaten To Pull Out Of Uneconomical Contracts
By Paul Homewood, Not a Lot of People Know That, June 24, 2023
“Yet again we see this silly comment by the Telegraph about a global race to net zero. This is the pathetic nonsense spouted by the increasingly irrelevant Jeremy Warner and Ben Marlow. “There is of course no such race, which implies that there is some sort of reward for those countries jumping off the clifftop first! On the contrary, most of the world is quite happy to let Britain, the EU and US continue with the madness, while they make themselves richer with the help of fossil fuels.”

Siemens Energy stocks fall 36% — turbines are degrading faster than expected
By Jo Nova, Her Blog, June 26, 2023
Comment from David Maddison: “Despite the wind being free, collecting it appears to cost a fortune. Just ask any sailboat owner!”

Offshore wind is a terrible way to reduce CO2 emissions
By David Wojick, CFACT, June 26th, 2023
https://www.cfact.org/2023/06/26/offshore-wind-is-a-terrible-way-to-reduce-co2-emissions/

Alternative, Green (“Clean”) Energy -- Other
A Closer Look at the Impact of Bioenergy
By Charles Rotter, WUWT, June 27, 2023
Link to paper: Bioenergy-induced land-use-change emissions with sectorally fragmented policies
https://www.nature.com/articles/s41558-023-01697-2

Alternative, Green (“Clean”) Energy -- Storage
Fire Chief Warns Against Battery Charging At Night
By Paul Homewood, Not a Lot of People Know That, June 30, 2023
https://notalotofpeopleknowthat.wordpress.com/2023/06/30/fire-chief-warns-against-battery-charging-at-night/
From Nottinghamshire Fire and Rescue Service: “A fire investigation has found that lithium-ion battery failure within a laptop left on charge overnight caused a fire that left a Woodthorpe home destroyed.” [Boldface added]

Nobel-winning lithium battery inventor John Goodenough dies at 100
By AFP Staff Writers, Washington (AFP), June 27, 2023
https://www.energy-daily.com/reports/Nobel-winning_lithium_battery_inventor_John_Goodenough_dies_at_100_999.html

Alternative, Green (“Clean”) Vehicles
The EV Kool-Aid Acid Test
By Duggan Flanakin, Real Clear Energy, June 27, 2023
https://www.realclearenergy.org/articles/2023/06/27/the_ev_kool-aid_acid_test_943168.html
EVs may cause twice as many potholes to save the Planet
By Jo Nova, Her Blog, June 29, 2023
“Major roads are built to take heavier trucks, but suburban streets were only designed to cope with the occasional truck — not the truck that lives next door. When every car has 300 kilograms [660 pounds] more ‘luggage’ there will be consequences.”

What? No Air-Con?
By Paul Homewood, Not a Lot of People Know That, June 24, 2023
https://notalotofpeopleknowthat.wordpress.com/2023/06/24/what-no-air-con/

E-Scooter Tragedy
By Paul Homewood, Not a Lot of People Know That, June 26, 2023
https://notalotofpeopleknowthat.wordpress.com/2023/06/26/e-scooter-tragedy/

Carbon Schemes
Republicans Must Embrace [Carbon Capture Utilization And Storage] CCUS Projects in Louisiana
By Dan Eberhart, Real Clear Energy, June 27, 2023
https://www.realclearenergy.org/articles/2023/06/27/republicans_must_embrace_ccus_projects_in_louisiana_943409.html
[SEPP Comment: Need to squander faster in Louisiana than in Wyoming and North Dakota?]

Health, Energy, and Climate
FDA’s Priorities Have Literally Gone To The Dogs
By Henry I. Miller, MS, MD, ACSH, June 15, 2023
https://www.acsh.org/news/2023/06/15/fda%E2%80%99s-priorities-have-literally-gone-dogs-17096

Other Scientific News
New gravitational waves observation run to reveal more of the universe's secrets
By Staff Writers, Cardiff UK (SPX), Jun 23, 2023
https://www.energy-daily.com/reports/New_gravitational_waves_observation_run_to_reveal_more_of_the_universe_s_secrets_999.html

BELOW THE BOTTOM LINE

Another Climate-Savior Alarmist Jetsets To South America – For Two Months Of Vacation!
By P Gosselin, No Tricks Zone, June 30, 2023
“Climate activist hypocrite of the month”

Expect a hot, smoky summer in much of America. Here’s why you’d better get used to it
By Seth Borenstein, AP, June 29, 2023
Racist Gas
By Tony Heller, His Blog, June 30, 2023
https://realclimatescience.com/2023/06/racist-gas/
“Carbon dioxide [and smoke] is again attacking people based on race and income.”

ARTICLES

No articles this week.